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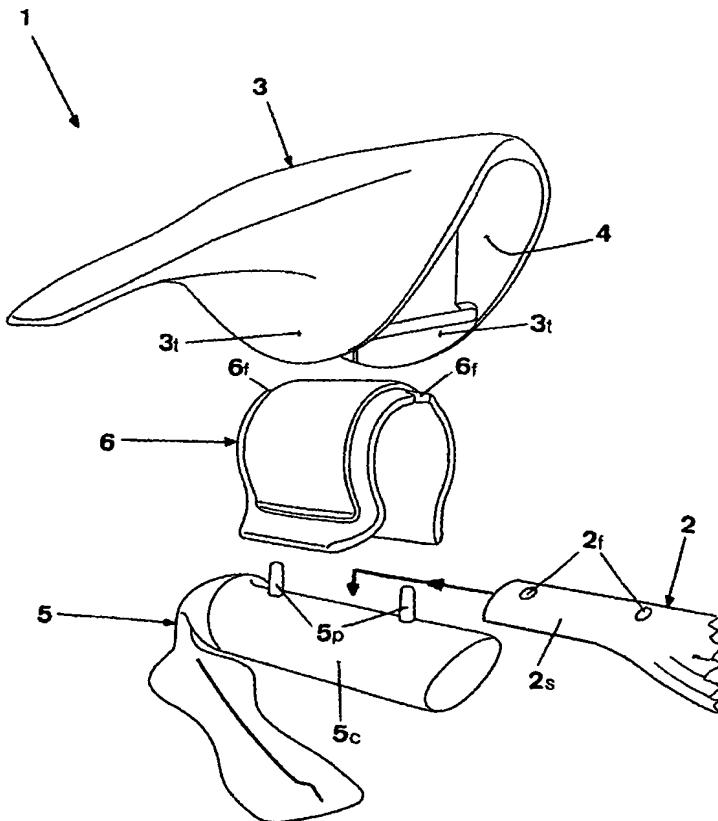
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[Continued on next page]

(54) Title: DECORATIVE TIE WHICH CAN BE JOINED TO A SHIRT COLLAR



(57) Abstract: A tie (1) joined to a shirt collar is described, said tie being composed of a linearly extending strip (2) which is arranged between a shaped clasp cover-piece (3) provided with a vertical cavity (4) and a clasp (5) shaped in the manner of an overturned U and able to be contained partly inside the cavity (4) so as to fix inside it the top end (2s) of the said strip (2) between the clasp (5) and the cavity (4). In the tie in question the body (5c) of the clasp (5) is substantially cylindrical and has, emerging from it perpendicularly, two or more studs (5p) which pass through a corresponding number of holes (2f) formed on the top end (2s) of the strip (2), said studs (5p) projecting from the holes (2f) so as to penetrate at least partly into a corresponding number of openings (6f) formed on a clip-like sleeve (6) which is open on one side and shaped so as to contain in a complementary manner the clasp (5) supporting thereon the abovementioned top end (2s) of the strip (2) passed through by the studs (5p), adhering thereto elastically, and so as to be contained in a complementary manner, remaining fixed there, inside the cavity (4) of the clasp cover-piece (3).

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

Decorative tie which can be joined to a shirt collar

The present invention relates to the sector of ties which can be joined to a shirt collar so as to  
5 perform a desired decorative function.

More particularly, the invention relates to that particular type of tie which is described in numerous documents according to the state of the art, including for example the PCT patent application published under  
10 number WO 99/09849, where the tie is composed of a linearly extending strip suitable for the desired decorative function and fixed by means of its arrangement in between a hook-type clasp to be fitted to the shirt collar and a clasp cover-piece which is  
15 shaped in varying manners, for example as a tie knot, and is fixed thereon.

The aim of this particular type of tie is that of being able to join together strips and clasp cover-pieces of different types so as to be able to vary the  
20 desired aesthetic and decorative effects by means of operations which can be performed rapidly and as easily as possible.

The examples of the present state of the art, including that cited above, have serious drawbacks  
25 which adversely affect the decorative function and limit the duration of the component parts.

For example, since the said linearly extending strip is fixed by gripping its top end between the said knot-like member and the associated clasp, the fabric  
30 or in any case the material from which it is made is subject to high stresses which crease it and produce folds which, in the long run, adversely affect the functionality and aesthetic appearance thereof.

This material, moreover, must have an absolutely  
35 constant thickness along the part which is gripped as

described above, otherwise engagement between the parts is defective, and achieving this, in addition to not always being possible, in any case results in increased costs.

5       Moreover, since the surfaces of the clasp and the abovementioned member between which the top end of the said strip is arranged have a practically flat profile, the part of the strip which emerges from the knot is also substantially flat and not curved as is the case  
10      with ties which are made entirely of fabric. This feature diminishes the overall effect of a tie of the type described, such that it is clearly recognisable at a first glance and the aesthetic/decorative appearance of the tie is negatively affected to a certain degree.

15      A further drawback also consists in the fact that the said strip of a tie of the type described may easily rotate about a vertical axis, with obvious negative effects on the aesthetic appearance of the said assembly. The various components of a tie  
20      according to the present state of the art, moreover, when they are made of plastic, are subject to wear over time and lose their functional capacity.

25      The inventor of the present invention has devised a tie of the type considered hitherto, in which all the drawbacks and the problems mentioned above have been overcome.

30      In the tie according to the invention, the linearly extending decorative strip is fixed to the body of the said clasp by means of the action of two or more studs which, projecting perpendicularly from the latter, pass through a corresponding number of openings formed on its said top end and penetrate at least partially into a corresponding number of holes formed on a sleeve-like clip which is open on one side and the  
35      internal surface of which adheres in a complementary

manner to the strip/clasp assembly when it is mounted and locked thereon and fixed there as a result of its flexural elasticity. The said body of the clasp is formed with an essentially cylindrical shape such that  
5 the strip which adheres to it emerges from the assembly curved in a semicylindrical manner, as occurs in ties which are made entirely of fabric.

The linearly extending strip moreover does not need to be gripped in a forced manner, since it is  
10 fixed by the studs described above and by the said clip-on sleeve, and therefore is not subject to damage.

The clasp cover-piece, moreover, has along its edges two coplanar or diverging flanges which, once the tie is assembled, rest on the user's body, preventing  
15 the abovementioned unaesthetic rotational movements of the said tie.

The clasp cover-piece, finally, may be applied using simple known methods, applying its cylindrical cavity onto the clip-on sleeve and fixing it on the latter by exerting a pressure thereon so as to produce elastic gripping between the two parts.  
20

All the advantageous results listed hitherto are achieved by means of the subject of the present invention which therefore consists of a decorative tie  
25 able to be joined to a shirt collar, as described in the accompanying Claim 1.

There now follows a more detailed description of a preferred example of embodiment of a tie according to the invention, chosen from among the numerous  
30 embodiments which can be achieved by a person skilled in the art who implements the teachings of the abovementioned Claim 1.

In the said description, reference will also be made to the accompanying drawings in which:

35 - Figure 1 shows an exploded, partial, perspective

view of the said example of embodiment of a tie according to the invention;

- Figure 2 shows a longitudinal section through the clasp/strip/clip-on sleeve assembly of a tie of the 5 type shown in Figure 1;

- Figure 3 shows a front view of the tie according to Figures 1 and 2.

With reference to Figures 1 and 2, in them it can be seen how, in the tie 1 according to the invention, a 10 clasp 5 of the type known per se is formed with a substantially cylindrical body 5c and with two studs 5p which project from it perpendicularly and pass through a corresponding number of holes 2f formed on the top end of a linearly extending strip 2 performing a decorative function and made of fabric, synthetic 15 resins, leather or other materials.

The strip 2 therefore remains fixed to the body 5c of the clasp 5 owing to the action of the studs described above, independently of any variations in its 20 thickness, and it is prevented from becoming separated from them by means of a clip-on sleeve 6 which is open on one side so that it can flex elastically and be mounted on the said clasp 5 by means of simple pressure. Obviously the internal surface of the sleeve 25 6 is formed so that it complements the assembly formed by the body 5c of the clasp 5 and the linearly extending strip 2.

Advantageously, in order to prevent relative rotation of the said sleeve 6 and the clasp 5, the 30 inventor has envisaged forming the said studs 5p with a length sufficient for them to project from the top end 2s of the strip 2, after passing through it, and penetrate at least partially, as shown more clearly in Figure 2, into a corresponding number of recesses 6f 35 formed on the sleeve 6. These recesses may consist of

lateral incisions, as shown in the drawings, or also through-holes (example not shown).

In this way the assembly is stably fixed, without having to wrinkle the top end 2s of the strip 2, and 5 the latter emerges from it curved with the same radius of curvature as the cylindrical body 5c of the clasp 5, achieving the desired result already described.

A clasp cover-piece 3, for example in the form of a tie-knot, as shown in the drawings, may be applied 10 onto the assembly by performing a simple elastic gripping action on the sleeve 6, as already illustrated above, so as to impart to the tie 1 the desired aesthetic effect which is conceptually entirely similar 15 (see Figure 3) to that of a tie of the conventional type.

It must also be pointed out, as already mentioned above, that the inventor has envisaged forming the clasp cover-piece 3 with the two lateral edges delimiting it folded outwards so as to form two flanges 20 3t which are coplanar or diverging from each other as shown in Figure 1.

These flanges, resting in the vicinity of the zone of the fastening button of a shirt collar, prevent rotation of any part of the tie 1, and therefore the 25 tie 1 as a whole, about a vertical axis, providing the tie according to the invention with the desired stability.

CLAIMS

1. Decorative tie (1) able to be joined to a shirt collar and composed of a linearly extending strip (2) which is suitable for the desired decorative function and arranged between a shaped clasp cover-piece (3) provided with a vertical cavity (4) and a clasp (5) shaped in the manner of an overturned U and able to be contained partly inside said cavity (4) so as to fix inside it the top end (2s) of the said strip (2) between the clasp (5) and the cavity (4), characterized in that the body (5c) of the clasp (5) is substantially cylindrical and has, emerging from it perpendicularly, two or more studs (5p) which pass through a corresponding number of holes (2f) formed on the said top end (2s) of the strip (2), said studs (5p) projecting further from the said holes (2f) so as to penetrate at least partly into a corresponding number of openings (6f) formed on a clip-like sleeve (6) which is made of flexurally elastic material and is open on one side and shaped so as to contain in a complementary manner the said clasp (5) supporting thereon the abovementioned top end (2s) of the strip (2) passed through by the studs (5p), adhering thereto elastically, and so as to be contained in a complementary manner, remaining fixed there, inside the said cavity (4) of the clasp cover-piece (3).

2. Decorative tie according to Claim 1, in which the said cavity (4) of the clasp cover-piece (3) is substantially semicylindrical and is complementary with respect to the external surface of the closed side of the said clip-on sleeve (6) which is contained inside it.

3. Tie according to one of the preceding claims, in which the lateral edges of the said clasp cover-piece (3) are folded so as to create two flat flanges

(3t) which are coplanar or diverging with respect to each other.

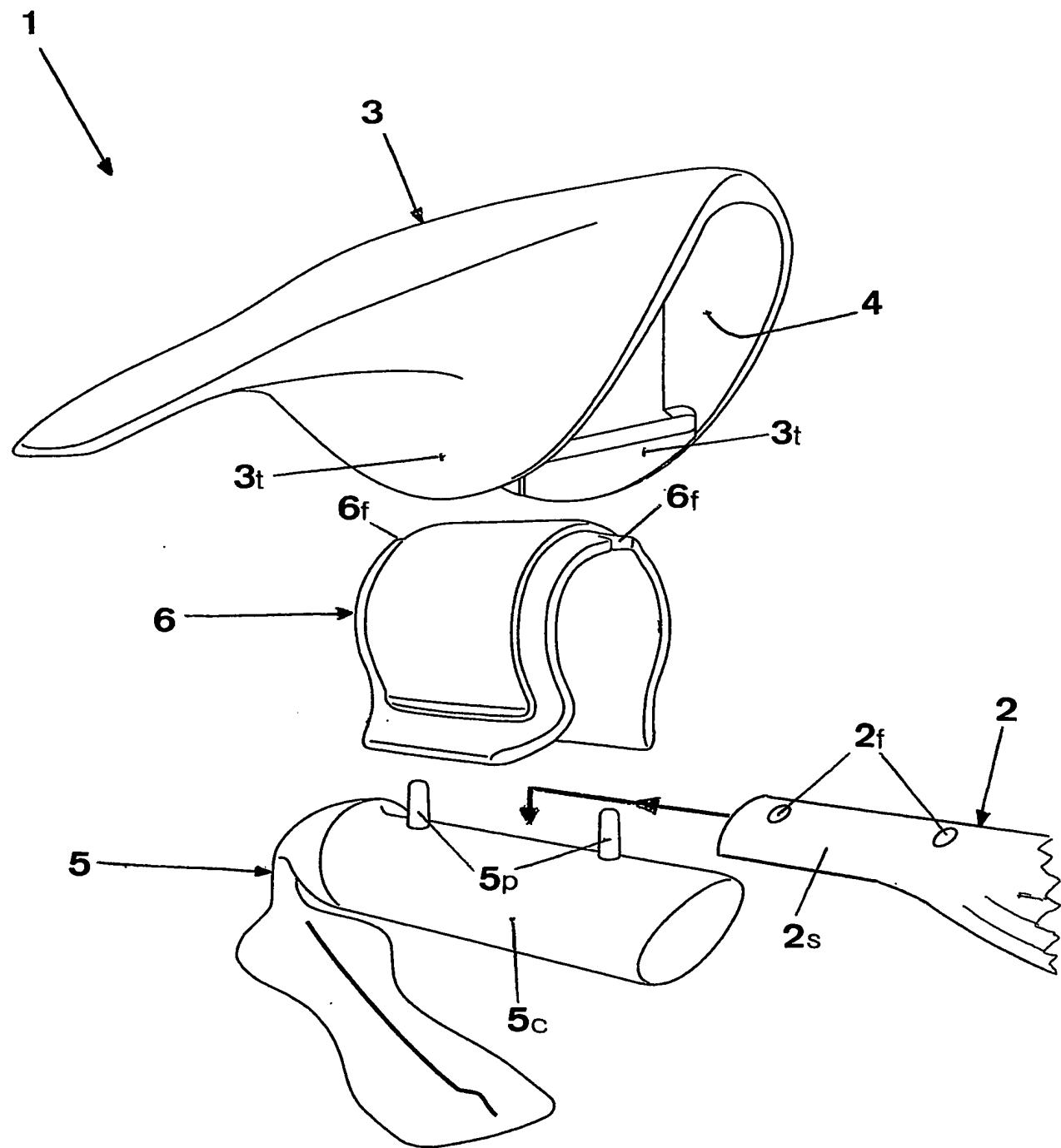
**FIG.1**

FIG. 2

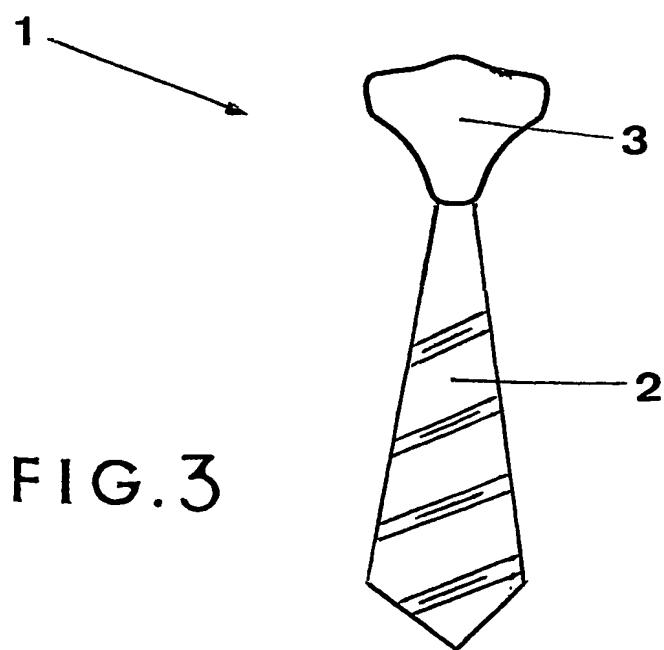
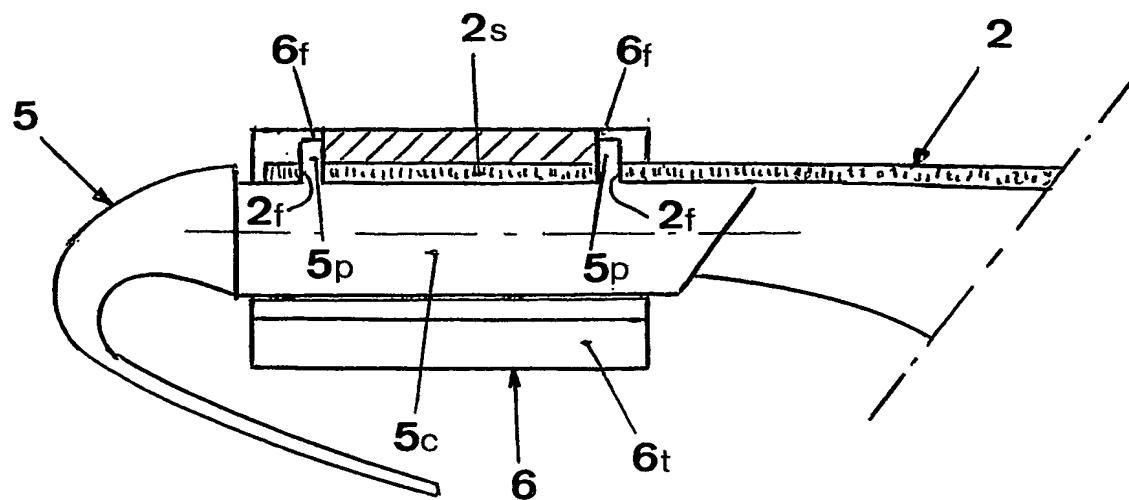


FIG. 3

## INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A41D25/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A41D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 084 916 A (AUSTIN JOSEPH R) 4 February 1992 (1992-02-04) the whole document ---	1-3
A	WO 99 09849 A (SENS GROSHOLZ PEER) 4 March 1999 (1999-03-04) cited in the application the whole document ---	1-3
A	US 2 636 178 A (COREY ROBERT J) 28 April 1953 (1953-04-28) column 2, line 54 -column 4, line 5; figures ---	1-3
A	DE 299 14 161 U (VON BURGSDORFF HEIKEDINE) 21 December 2000 (2000-12-21) figures 2-4 ---	1-3
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 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

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- \*E\* earlier document but published on or after the International filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

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**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 778 453 A (CHEN HUI-SHEN) 14 July 1998 (1998-07-14) the whole document -----	1-3

**INTERNATIONAL SEARCH REPORT**

patent family members

PCT/IB 03/00118

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 5084916	A 04-02-1992	NONE		
WO 9909849	A 04-03-1999	IT RM970514 A3 AU 8641298 A WO 9909849 A1		25-02-1999 16-03-1999 04-03-1999
US 2636178	A 28-04-1953	NONE		
DE 29914161	U 21-12-2000	DE 29914161 U1		21-12-2000
US 5778453	A 14-07-1998	NONE		